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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,843	04/15/2004	Robert J. Kansy	RFMI01-00227	6859

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EXAMINER	
LE, NHAN T	

ART UNIT	PAPER NUMBER
2685	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/824,843	KANSY, ROBERT J.	
	Examiner	Art Unit	
	Nhan T. Le	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-5, 7-9, 11-17, 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamgar et al (US 6,324,387) in view of Talmola et al (US 6,822,696).

As to claims 1, 7, 15, Kamgar teaches a circuit, comprising: one first amplifier operable to amplify an incoming signal to produce an amplified incoming signal (see fig. 1, number 105, col. 2, lines 55-67, col. 3, lines 1-20), the incoming signal associated with a desired signal (see col. 2, lines 55-67, col. 3, lines 1-20); and a controller operable, in response to a first threshold of the amplified signal (see fig. 1, number 110, 150, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61) and the second threshold of the desired signal (see fig. 1, number 110, 155, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61). Kamgar fails to teach the controller operable, in response to the amplified signal exceeding the first threshold and the desired signal not exceeding the second threshold and increase a current supplied to the one or more first amplifiers. Talmola teaches controller operable in response to the amplified signals and increase a current supplied to the one first amplifier (see fig. 3, number 318, col. 2, lines

46-67, col. 3, lines 1-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Talmola into the system of Kamgar in order to reduce the power consumption of the receiver (as suggested by Talmola col. 3, lines 34-38).

As to claims 2, 8, Kamgar further teaches a first comparator (see fig. 1, number 110, 150, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61) operable to compare the amplified incoming signal to the first threshold; and a second comparator (see fig. 1, number 110, 155, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61) operable to compare the desired signal to the second threshold.

As to claims 3, 16, Kamgar further a filter (see fig. 1, number 125, col. 2, lines 55-67, col. 3, lines 1-20) operable to filter the incoming signal to produce a filtered incoming signal; and wherein the one first amplifier (see fig. 1, number 105, col. 2, lines 55-67, col. 3, lines 1-20) are operable to amplify the filtered incoming signal to produce the amplified incoming signal.

As to claims 4, 9, 17, the combination of Kamgar and Talmola teaches a mixer (see Talmola fig. 3, number 306, col. 2, lines 46-67, col. 3, lines 1-33) operable to perform a mixing operation involving the amplified incoming signal to produce a mixed incoming signal; a filter (see Kamgar see fig. 1, number 125, col. 2, lines 55-67, col. 3, lines 1-20) operable to filter the mixed incoming signal to produce a filtered mixed incoming signal, a third amplifier (see fig. 3, number 308, col. 2, lines 46-67, col. 3, lines 1-33) operable to amplify the filtered mixed incoming signal to produce the desired signal

As to claim 5, the combination of Kamgar and Talmola further teaches wherein the filter comprises a bandpass filter (see Kamgar fig. 1, number 125, col. 3, lines 11-20).

As to claims 11-14, the claims are rejected as to claim 1.

As to claims 21, 23, 25, the combination of Kamgar and Talmola teaches wherein the controller is operable, in response to the amplified incoming signal exceeding the first threshold (see Kamgar fig. 1, number 110, 150, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61) and the desired signal not exceeding the second threshold (see Kamgar fig. 1, number 110, 155, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61), to allow the one or more second amplifiers to amplify the incoming signal (see Talmola col. 3, lines 8-38).

As to claims 22, 24, 26, the combination of Kamgar and Talmola teaches wherein the controller is operable, in response to the amplified incoming signal exceeding the first threshold (see Kamgar fig. 1, number 110, 150, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61) and the desired signal not exceeding the second threshold (see Kamgar fig. 1, number 110, 155, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61), to increase the current supplied to the one or more first amplifiers (see Talmola col. 3, lines 8-38).

2. Claims 6, 10, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamgar et al (US 6,324,387) in view of Talmola et al (US 6,822,696) further in view of Callaway (US 5,734,974).

As to claims 6, 10, 18, the combination of Kamgar and Talmola fails to teach a switch coupling a power supply to at least one of the one or more first amplifier and the controller operable to open and close the switch. Talmola teaches switch coupling a power supply to at least one of the one or more first amplifier and the controller operable to open and close the switch (see col. 2, lines 2-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Callaway into the system of Kamgar and Talmola in order to control the received signals.

As to claims 19-20, the combination of Kamgar,Talmola and Callaway teaches determining whether at least one of the amplified incoming signal no longer exceeds the

first threshold and the desired signal exceeds the second threshold (see Kamgar fig. 1, number 110, 150, 155, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61) ; and in response to determining that the amplified incoming signal no longer exceeds the first threshold or the desired signal exceeds the second threshold, at least one of no longer allowing the one or more second amplifiers to amplify the incoming signal; and decreasing the current supplied to the one or more first amplifiers (see Talmola see fig. 3, number 318, col. 2, lines 46-67, col. 3, lines 1-33); wherein no longer allowing the one or more second amplifiers to amplify the incoming signal and decreasing the current supplied to the one or more first amplifiers comprises opening the switch (see Callaway col. 2, lines 2-54).

Response to Arguments

Applicant's arguments filed On 10/14/2005 have been fully considered but they are not persuasive.

As to claim 1, 7, 15, Applicant argues that Kamgar and Talmola fails to teach adjusting the bias current of an amplifier based on the comparing two signals to two voltage references and the applied reference are not combinable. The examiner disagrees. Kamgar teaches a receiver in communication system to control power having a LNA control circuit for receive closed loop automatic gain control wherein the comparators compare the input signals with the reference signals and the gain of the LNA is adjusted based on the two comparator output signals (see fig. 1, number 110, 150, 155, col. 2, lines 55-67, col. 3, lines 1-20, col. 4, lines 54-61); In fact, Kamgar inherently teaches adjusting the bias current of an amplifier based on the comparing two signals to two voltage references by adjusting the gain of the amplifier. However, Talmola teaches a receiver wherein the controller reduces or increases the bias current applied to the amplifier in order to reduce the power consumption of the receiver (see col. 3, lines 7-38). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case,

the motivation is found in the references themselves (Talmola US 6,822,696, to reduce the power consumption of the receiver, see col. 3, lines 34-38).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T Le whose telephone number is 571-272-7892. The examiner can normally be reached on 08:00-05:00 (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

N. Le

Nhan Le

1-8-2006

NGUYEN T. VO
PRIMARY EXAMINER